NEW SOURCE CONSTRUCTION PERMIT
and MINOR SOURCE OPERATING PERMIT
OFFICE OF AIR MANAGEMENT

American Woodmark
5300 East Side Parkway
Gas City, Indiana 46933

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-5.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 053-11188-00058	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a woodworking and surface coating operation.

Authorized Individual:	John M. Schroer
Source Address:	5300 East Side Parkway, Gas City, Indiana 46933
Mailing Address:	P.O. Box 11, Gas City, Indiana 46933
Phone Number:	540-955-3174
SIC Code:	2434
County Location:	Grant
County Status:	Attainment for all criteria pollutants
Source Status:	Minor Source, under PSD Rules;

A.2 Emissions units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

(a) Finishing Line 1 (Main Line) consists of one (1) Roll Coater, seven (7) Spray Booths, two (2) Stain Wiping Machines, and seven (7) Ovens. Four paint booths are controlled by a water wash system and three are controlled by dry filters. All paint booths are vented to a common thermal oxidizer with a total heat input capacity of 9 MMBtu/hr. The air flow from the stain wiping machines is vented to the thermal oxidizer and to the spray machine. The oven emissions are vented back to the spray booths. The ovens are hot water to air heat exchangers.

(b) Finishing Line 2 (White Frame Line) consists of one (1) spray booth and one (1) oven. The spray booth is controlled by a water wash system. The oven is a hot water to air heat exchanger.

(c) Finishing Line 3 (Expedite System) consists of one (1) spray booth, and one (1) oven. The spray booth is controlled by a dry filter. The oven is a hot water to air heat exchanger.

(d) Woodworking operations not defined in Finishing Lines 1, 2 or 3 are controlled by a baghouse (BH-1). Finishing Line 1 (Main Line) consists of two (2) Rotary Sanding Machines, five (5) Panel Cleaning Machines, three (3) Denibbing Machines and two (2) Hand Sand Conveyors. The woodworking operations are controlled by a common baghouse (BH-2). Finishing Line 2 (White Frame Line) consists of one (1) Denibbing Machine, one (1) Manual Hand Sanding station and one (1) panel cleaning machine. The woodworking operations are controlled by a baghouse (BH-2). Finishing Line 3 (Expedite System) consists of one (1) manual hand sanding station. The sanding operations are controlled by a baghouse (BH-2). The woodworking operations have a maximum capacity of 1.25 tons/hour. The raw material being used is wood and the finished product are kitchen cabinets and furniture.

(e) Natural gas fired combustion sources of heat input equal to or less than ten (10,000,000) Btu per hour.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Modification to Permit [326 IAC 2]

Notwithstanding Condition B.6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.6 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the emissions units were constructed as proposed in the application. The emissions units covered in the New Source Construction Permit may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

(d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees)**.**

(e) Pursuant to 326 IAC 2-7-4(a)(1)(A)(ii) and 326 IAC 2-5.1-4, the Permittee shall apply for a Title V operating permit within twelve (12) months of the date on which the source first

meets an applicability criterion of 326 IAC 2-7-2.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit VOC's is limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Preventive Maintenance Plan [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM.

C.3 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;

(c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;

(d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

(1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]

(2) The Permittee and IDEM, OAM acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

C.4 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)] :

(a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, and the Permits Branch within thirty (30) days of the change.

(b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).

(c) IDEM, OAM shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

C.5 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

(a) Violation of any conditions of this permit.

(b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.

(c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.

(d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.

(e) For any cause which establishes in the judgment of IDEM, the fact that continuance of

this permit is not consistent with purposes of this article.

C.6 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.7 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

Testing Requirements

C.8 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the “authorized individual” as defined by 326 IAC 2-1.1-1.

Compliance Monitoring Requirements

C.9 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment upon initial operation.

C.10 Maintenance of Monitoring Equipment [IC 13-14-1-13]

(a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.12 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

Record Keeping and Reporting Requirements

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

(a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.

(b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.

(c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).

(d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 Annual Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

The submittal by the Permittee does require the certification by the “authorized individual” as

defined by 326 IAC 2-1.1-1.

C.16 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.

(b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.

(c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.

(d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.

(e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.17 General Record Keeping Requirements [326 IAC 2-6.1-2]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM or OAM representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where applicable:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where applicable:

(1) Copies of all reports required by this permit;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM on or before the date it is due.

(d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.

(g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Finishing Line 1 (Main Line) consists of one (1) Roll Coater, seven (7) Spray Booths, two (2) Stain Wiping Machines, and seven (7) Ovens. Four paint booths are controlled by a water wash system and three are controlled by dry filters. All paint booths are vented to a common thermal oxidizer with a total heat input capacity of 9 MMBtu/hr. The air flow from the stain wiping machines is vented to the thermal oxidizer and to the spray machine. The oven emissions are vented back to the spray booths. The ovens are hot water to air heat exchangers.

(b) Finishing Line 2 (White Frame Line) consists of one (1) spray booth and one (1) oven. The spray booth is controlled by a water wash system. The oven is a hot water to air heat exchanger.

(c) Finishing Line 3 (Expedite System) consists of one (1) spray booth, and one (1) oven. The spray booth is controlled by a dry filter. The oven is a hot water to air heat exchanger.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.1.2 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

(1) The input VOC shall be limited as follows:

(a) Finishing Line 1 shall use no greater than 704 tons of VOC, including coatings, dilution solvents, and cleaning solvents per year. The limited PTE equivalent after the thermal oxidizer at 85.5% overall efficiency is 102 tons of VOC per year.

(b) Finishing Lines 2 and 3 combined, shall use no greater than 147 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per year. This usage limit is required to limit the potential to emit of VOC to less than 250 tons

per year.

(2) The thermal oxidizer shall operate at a minimum of 85.5% overall efficiency.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.3 General Provisions Relating to HAPs [326 IAC 20-1-1][40 CFR 63, Subpart A]

The provisions of 40 CFR 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart JJ.

D.1.4 Wood Furniture Manufacturing Operations NESHAP [40 CFR Part 63, Subpart JJ]

(a) The wood furniture coating operations are subject to 40 CFR Part 63, Subpart JJ, which is incorporated by reference as 326 IAC 20-1, and shall be in compliance upon startup. A copy of the rule is attached.

(b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

(1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:

(A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of eight-tenths (0.8) of a pound VHAP per pound solids; or

(B) Use compliant finishing materials in which all stains have a maximum VHAP content of (1.0) pound VHAP per pound solid, as applied.

Use compliant finishing materials in which all washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of eight-tenths (0.8) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or

(C) Use a control device to limit emissions to eight-tenths (0.8) of a pound VHAP per pound solids; or

(D) Use a combination of (A), (B), and (C). The Permittee has chosen to comply according to this condition.

(2) Limit VHAP emissions contact adhesives as follows:

(A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed two-tenths (0.2) of a pound VHAP per pound solids.

(B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed two-tenths (0.2) of a pound VHAP per pound solids.

(C) Use a control device to limit emissions to two-tenths (0.2) of a pound VHAP per pound solids.

(3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.

D.1.5 Work Practice Standards [40 CFR 63.803]

The Permittee shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

(a) Operator training course.
(b) Leak inspection and maintenance plan.
(c) Cleaning and washoff solvent accounting system.
(d) Chemical composition of cleaning and washoff solvents.
(e) Spray booth cleaning.
(f) Storage requirements.
(g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
(h) Line cleaning.
(i) Gun cleaning.
(j) Washoff operations.
(k) Formulation assessment plan for finishing operations.

D.1.6 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the surface coating facilities shall not exceed the amount determined by the equation indicated below.

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.7 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices.

Compliance Determination Requirements

D.1.8 Thermal Oxidizer

The thermal regenerative oxidizer, with a natural gas heat input rate of 2.7 MMBtu/hr, should operate at all times when Line 1 is operating, to comply with 40 CFR Part 63 Subpart JJ and such that 326 IAC 2-2 (Prevention of Significant Deterioration) does not apply.

D.1.9 Dry Filter

The dry filters for Lines 1 and 3 should be in place and operating at all times when Lines 1 or 3 are operating.

D.1.10 Water Wash System

The water wash system for Lines 1 and 2 should be in place and operating at all times when Lines 1 or 2 are operating.

D.1.11 Testing Requirements [326 IAC 3-6] [326 IAC 2-7-6(1),(6)]

(a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC and efficiency testing utilizing methods as approved by the Commissioner to comply with Condition D.1.2(1)(a),(b) and (2) and Condition D.1.16. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.

(b) IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.12 Volatile Organic Compounds (VOC)

(a) Compliance with the VOC content and usage limitations for Finishing Lines 1, 2, and 3 of the surface coating operation contained in Condition D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

(b) Compliance with Condition D.1.2 shall be demonstrated within 30 days of the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

D.1.13 Compliance Procedures and Monitoring Requirements [40 CFR 63.804]

Pursuant to 40 CFR 63, Subpart JJ:

(a) Initial compliance according to 40 CFR 63.804(d)(1), (d)(2) or (e)(1) shall be demonstrated by submitting the Initial Compliance Status Report required in Condition D.1.21(a).

(b) To comply according to 40 CFR 63.804(d)(3) or (e)(2), initial performance testing of the thermal oxidizer must be conducted in accordance with the following requirements:

(1) For finishing materials, 40 CFR 63.804(f)(4)(i), (ii), (iii), (iv)(A), and (v);

(2) For contact adhesives, 40 CFR 63.804(f)(6)(i), (ii), (iii), (iv)(A), and (v); and

(3) Performance test methods and procedures specified in 40 CFR 63.805(b).

D.1.14 Particulate Matter (PM)

PM control shall be in operation at all times when the spray booths are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.15 Monitoring (VOC)

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (S3, S4, S5) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) Daily inspections shall be performed to verify the placement, integrity and operation of the water wash system. To monitor the performance of the water wash system, weekly observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.16 Thermal Oxidizer

The thermal oxidizer shall operate at a minimum zone temperature of 1650 ^{o}F or at a temperature determined in the latest compliance test and shall capture at least 90% and thermally oxidize at a minimum of 95% of the VOC's from Line 1. The overall VOC control level for Line 1 should be at least 85.5%.

D.1.17 Compliance Procedures and Monitoring Requirements [40 CFR 63.804]

Pursuant to 40 CFR 63, Subpart JJ:

(a) Continuous compliance according to 40 CFR 63.804(d)(1), (d)(2) or (e)(1) shall be demonstrated by submitting the semiannual reports required in Condition D.1.21(b).

(b) To demonstrate continuous compliance with 40 CFR 63.804(d)(3) or 63.804(e)(2), monitoring shall be conducted in accordance with the following requirements:

(1) For finishing materials, 40 CFR 63.804(g)(4)(i), (ii)(A), and (iv);

(2) For contact adhesives, 40 CFR 63.804(g)(6)(i), (ii)(A), and (iv); and

(3) Performance test methods and procedures specified in 40 CFR 63.805(b).

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)] [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.18 Record Keeping Requirements

(a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.2.

(1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

(3) The cleanup solvent usage for each month;

(4) The total VOC usage for each month; and

(5) The weight of VOCs emitted for each compliance period.

(b) To document compliance with Condition D.1.14, the Permittee shall maintain a log of weekly overspray observations, daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.19 Record Keeping Requirements [40 CFR 63.806]

Pursuant to 40 CFR Part 63, Subpart JJ, to document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with the applicable provisions of 40 CFR 63.806, and in particular with (a) through (g) below. Records maintained for (a) through (g) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.4.

(a) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.

(b) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.

(c) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.

(d) The VHAP content in weight percent of each thinner used.

(e) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.

(f) For use of the thermal oxidizer to comply, 40 CFR 63.806(f) and (g).

(g) To demonstrate compliance with Condition D.1.4, the Permittee shall maintain records

demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.

D.1.20 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 and D.1.12 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the three (3) month period being reported.

D.1.21 Reporting Requirements [40 CFR 63.807]

Pursuant to 40 CFR Part 63, Subpart JJ, to demonstrate compliance with Condition D.1.4 the Permittee shall submit reports in accordance with the applicable provisions of 40 CFR 63.807, and in particular with (a) through (c) below.

(a) An Initial Compliance Report to document compliance with Condition D.1.4 and the Certification form, shall be submitted within sixty (60) days following the compliance date of January 2000. The Initial Compliance Report must include data from the entire month that the compliance date falls.

(b) A semi-annual Continuous Compliance Report to document compliance with Condition D.1.5 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

(1) For the first year following the compliance date, the six (6) month period shall begin on the first day of the month after which the operation commences.

(2) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.

(c) For use of the thermal oxidizer to comply, the excess emissions and continuous monitoring system performance report and summary report required in 40 CFR 63.807(d).

(d) The reports required in (a), (b) and (c) of this condition shall be submitted to:
Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions unit Description:

Woodworking operations not defined in Finishing Lines 1, 2 or 3 are controlled by a baghouse (BH-1). Finishing Line 1 (Main Line) consists of two (2) Rotary Sanding Machines, five (5) Panel Cleaning Machines, three (3) Denibbing Machines and two (2) Hand Sand Conveyors. The woodworking operations are controlled by a common baghouse (BH-2). Finishing Line 2 (White Frame Line) consists of one (1) Denibbing Machine, one (1) Manual Hand Sanding station and one (1) panel cleaning machine. The woodworking operations are controlled by a baghouse (BH-2). Finishing Line 3 (Expedite System) consists of one (1) manual hand sanding station. The sanding operations are controlled by a baghouse (BH-2). The woodworking operations have a maximum capacity of 1.25 tons/hour. The raw material being used is wood and the finished product are kitchen cabinets and furniture.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the woodworking facilities shall not exceed 4.76 pounds per hour when operating at a process weight rate of 2500 pounds per hour.

The pounds per hour limitation was calculated with the following equation:
Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this emissions unit and its control device.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.3 Particulate Matter (PM)

The baghouses, identified as BH-1 BH-2, for PM control shall be in operation at all times when the sanders, denibbers, panel sanders and cleaners, and saws are in operation.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.4 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the woodworking operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

D.2.5 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) The affected compartments will be shut down immediately until the failed units have

been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as a malfunction and the Permittee satisfies the requirements of the Malfunctions Report Condition of this permit (Section C - Malfuctions Report [326 IAC 1-6-2]).

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as a malfunction and the Permittee satisfies the requirements of the Malfunctions Report Condition of this permit (Section C - Malfunctions Report [326 IAC 1-6-2]).

SECTION D.3 Emissions unit OPERATION CONDITIONS

Emissions unit Description: Natural gas fired combustion sources of heat input equal to or less than ten million (10,000,000) Btu per hour.

Emission Limitations and Standards

D.3.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (e) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from any facility used for indirect heating purposes which has 250 mmBtu/hr heat input or less and which began operation after June 8, 1972, shall in no case exceed 0.6 lb/mmBtu heat input.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

Quarterly Report
VOC and VHAP usage - Wood Furniture NESHAP

Source Name: American Woodmark
Source Address: 5300 East Side Parkway, Gas City, Indiana 46933
Mailing Address: P.O. Box 11, Gas City, Indiana 46933
Facility: Surface Coating
Parameter: VOC and VHAPs - NESHAP
Limit:
(1) Finishing operations -1.0 lb VHAP/lb Solids
(2) Thinners used for on-site formulation of washcoats, basecoats and enamels - 3% VHAP content by weight
(3) All other thinner mixtures - 10% VHAP content by weight
(4) Foam adhesives meeting the upholstered seating flammability requirements - 1.8 lb VHAP/lb Solids
(5) All other contact adhesives - 1.0 lb VHAP/lb Solids
(6) Strippable spray booth material - 0.8 pounds VOC per pound solids

YEAR:_____

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners used for on-site formulation (% by weight)	All other thinner mixtures (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb Solid)	Contact adhesives (lb VHAP/lb Solid)	Strippable spray booth material (lb VOC/lb Solid)
1						
2						
3						

9 No deviation occurred in this three month period.

9 Deviation/s occurred in this three month period.
Deviation has been reported on:

Submitted by: _____
Title/Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PSD Minor Limit Quarterly Report

Source Name: American Woodmark
Source Address: 5300 East Side Parkway, Gas City, Indiana 46933
Mailing Address: P.O. Box 11, Gas City, Indiana 46933
MSOP No.: 053-11188-00058
Facility: Line 1 and Lines 2 & 3
Parameter: VOC
Limit: Limit: VOC input: Line 1 = 704 ton/year; Lines 2 & 3 = 147 ton/year
VOC emissions: Line 1 = 102 ton/year; Lines 2 & 3 = 147 ton/year

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
FAX NUMBER - 317 233-5967

This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY:_____PHONE NO. ( )_____
LOCATION: (CITY AND COUNTY)_____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____INSP:_____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON:_____
_____

DATE/TIME MALFUNCTION STARTED: _____/_____/ 19____ _____ AM /PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:
_____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE_____/_____/ 19____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER:_____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

_____

MEASURES TAKEN TO MINIMIZE EMISSIONS:_____

_____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES:_____
CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS:_____
CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT:_____
INTERIM CONTROL MEASURES: (IF APPLICABLE)_____
_____
_____

MALFUNCTION REPORTED BY:_____TITLE:_____
(SIGNATURE IF FAXED)
MALFUNCTION RECORDED BY:_____DATE:_____TIME:_____
*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for

the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

_____

_____

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.

2. I hold the position of _____ for _____.
(Title) (Company Name)

3. By virtue of my position with _____,I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____ .
(Company Name)

4. I hereby certify that American Woodmark, 5300 East Side Parkway, Gas City, Indiana 46933, has constructed the woodworking and surface coating operation in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on July 26, 1999 and as permitted pursuant to MSOP 053-11188, Plant ID No. 053-00058 issued on _____

5. I hereby certify that American Woodmark is now subject to the Title V program and will submit a Title V operating permit application within twelve (12) months from the postmarked submission date of this Affidavit of Construction.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

_____
Signature

_____
Date

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on this _____ day of _____, 19 _____ .

My Commission expires: _____

_____
Signature

_____
Name (typed or printed)

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a New Source Construction and Minor Source Operating Permit

Source Name: American Woodmark
Source Location: 5300 East Side Parkway, Gas City, Indiana 46933
County: Grant
SIC Code: 2434
Operation Permit No.: CP-053-11188-00058
Permit Reviewer: D. Harper

On October 29, 1999, the Office of Air Management (OAM) had a notice published in the Marion Chronicle Tribune, Marion, Indiana, stating that American Woodmark had applied for a New Source Construction Permit and Minor Source Operating Permit to operate and construct a woodworking and surface coating operation. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

1. Condition D.1.11 (a) Testing Requirements [326 IAC 3-6] [326 IAC 2-7-6(1),(6)] has been changed to clarify that testing is to comply with Condition D.1.2(a),(b) and Condition D.1.16.

   (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC **and efficiency** testing utilizing methods as approved by the Commissioner **to comply with Condition D.1.2(1)(a),(b) and (2), Condition D.1.16.** This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the emissions unit is in compliance.

2. Condition D.1.16 (Thermal Oxidizer) has been modified to include a minimum zone temperature that can be based in the latest compliance test.

   The thermal oxidizer shall operate at a minimum zone temperature of 1650 ^{o}F **or at a temperature determined in the latest compliance test** and shall capture at least 90% and thermally oxidize at a minimum of 95% of the VOC's from Line 1.

3. Condition C.9 (Compliance Monitoring [326 IAC 2-1.1-11]) has been modified to reflect that monitoring equipment must be installed upon operation rather than ninety (90) days after operation.

   Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment~~, no more than ninety (90) days after~~ **upon** initial operation.

~~If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend the compliance schedule an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Management~~
~~100 North Senate Avenue, P. O. Box 6015~~
~~Indianapolis, Indiana 46206-6015~~

~~in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date. The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.~~

4. For clarification, a thermal oxidizer and thermal incinerator can be used interchangeably, thus all references to the thermal oxidizer in the permit can be assumed to be referencing a thermal incinerator as described in NESHAP [40 CFR Part 63, Subpart JJ].

5. To assume PSD minor source status, Condition D.1.2(1)(a),(b) and (2), has been revised as follows:

(1) The input VOC shall be limited as follows:

(a) Finishing Line 1 shall use ~~a total of~~ **no greater than** 704 tons of VOC, including coatings, dilution solvents, and cleaning solvents per year. The limited PTE equivalent after the thermal oxidizer at 85.5% overall efficiency is 102 tons of VOC per year.

(b) Finishing Lines 2 and 3 combined, shall use ~~a total of~~ **no greater than** 147 tons of VOC, including coatings, dilution solvents, and cleaning solvents, per year. This usage limit is required to limit the potential to emit of VOC to less than 250 tons per year. ~~Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.~~

(2) The thermal oxidizer shall operate at a minimum of 85.5% overall effiiciency.

Compliance with these limits makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

On November 22, 1999, the OAM received comments from Thomas Rarick of Keramida Environmental, Inc. on the proposed construction permit. The summary of the comments are as follows:

Comment 1:

Keramida requests that the observations of the overspray in Condition D.1.15(b) be changed from daily to weekly to be consistent with the monitoring described in D.1.15(a) and the reporting requirements found in D.1.18(b).

Response 1:

Condition D.1.15 (b) Monitoring (VOC) has been changed to state that observations shall be performed weekly rather than daily to monitor the performance of the water wash system.

(b) Daily inspections shall be performed to verify the placement, integrity and operation of the water wash system. To monitor the performance of the water wash system, ~~daily~~ **weekly** observations shall be made of the overspray while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Comment 2:

Keramida requests that the observations of the overspray on the rooftops and nearby ground in Condition D.1.15(c) be changed from weekly to monthly to be consistent with the reporting requirements found in D.1.18(b).

Response 2:

Condition D.1.15 (c) Monitoring (VOC) has been changed to state that inspections shall be performed monthly rather than weekly on the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground.

(c) ~~Weekly~~ **Monthly** inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

Comment 3:

Keramida requests that Condition D.2.4, Visible Emissions Notations, be removed from the permit. The allowable PM emission rate is 4.76 lbs/hr, as stated in Condition D.2.1. This is significantly less than 10 lbs/hr. A small source does not warrant the compliance monitoring required by this permit. Keramida requests that Condition D.2.4 be eliminated. Likewise, Keramida requests that Condition D.2.7, Record Keeping Requirements, also be removed from the permit.

Response 3:

Condition D.2.4 (Visible Emissions Notations) has been removed because the woodworking operation emits less than 10 pounds per hour of PM. Conditions following the removal have been renumbered.

Condition D.2.7 (Record Keeping Requirements) has been removed to reflect the removal of Condition D.2.4.

Comment 4:

Keramida would request that Condition D.2.6, Broken or Failed Bag Detection, be eliminated, since the intent of this condition is already covered by other conditions, which may in fact conflict with these conditions. Additionally, sections (a) and (b) of this condition both state that “Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).” Section B of this permit does

not reference any requirements for emergency provisions.

Response 4:

Condition D.2.6 (Condition D.2.5 after renumbering) (Broken Bag or Failed Bag Detection) will not be eliminated but has been modified so that Emergency Provisions of the Title V Program are not referenced.

(a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as ~~an emergency~~ **a malfunction** and the Permittee satisfies the requirements of the ~~emergency provisions~~ **Malfunctions Report Condition** of this permit ~~(Section B - Emergency Provisions).~~ **(Section C - Malfunctions Report [326 IAC 1-6-2]).**

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as ~~an emergency~~ **a malfunction** and the Permittee satisfies the requirements of the ~~emergency provisions~~ **Malfunctions Report Condition** of this permit ~~(Section B - Emergency Provisions).~~ **(Section C - Malfunctions Report [326 IAC 1-6-2]).**

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a New Source Construction and Minor Source Operating Permit

Source Background and Description

Source Name:	American Woodmark
Source Location:	P.O. Box 11, Gas City, Indiana 46933
County:	Grant
Construction Permit No.:	CP-053-11188-00058
SIC Code:	2434
Permit Reviewer:	D. Harper

The Office of Air Management (OAM) has reviewed an application from American Woodmark relating to the construction and operation of a woodworking and surface coating operation.

New Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

(a) Finishing Line 1 (Main Line) consists of one (1) Roll Coater, seven (7) Spray Booths, two (2) Stain Wiping Machines, and seven (7) Ovens. Four paint booths are controlled by a water wash system and three are controlled by dry filters. All paint booths are vented to a common thermal oxidizer with a total heat input capacity of 9 MMBtu/hr. The air flow from the stain wiping machines is vented to the thermal oxidizer and to the spray machine. The oven emissions are vented back to the spray booths. The ovens are hot water to air heat exchangers.

(b) Finishing Line 2 (White Frame Line) consists of one (1) spray booth and one (1) oven. The spray booth is controlled by a water wash system. The oven is a hot water to air heat exchanger.

(c) Finishing Line 3 (Expedite System) consists of one (1) spray booth, and one (1) oven. The spray booth is controlled by a dry filter. The oven is a hot water to air heat exchanger.

(d) Woodworking operations not defined in Finishing Lines 1, 2 or 3 are controlled by a baghouse (BH-1). Finishing Line 1 (Main Line) consists of two (2) Rotary Sanding Machines, five (5) Panel Cleaning Machines, three (3) Denibbing Machines and two (2) Hand Sand Conveyors. The woodworking operations are controlled by a common baghouse (BH-2). Finishing Line 2 (White Frame Line) consists of one (1) Denibbing Machine, one (1) Manual Hand Sanding station and one (1) panel cleaning machine. The woodworking operations are controlled by a baghouse (BH-2). Finishing Line 3 (Expedite System) consists of one (1) manual hand sanding station. The sanding operations are controlled by a baghouse (BH-2). The woodworking operations have a maximum capacity of 1.25 tons/hour. The raw material being used is wood and the finished product are kitchen cabinets and furniture.

(e) Natural gas fired combustion sources of heat input equal to or less than ten (10,000,000) Btu per hour.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (scfm)	Temperature (^{0}F)
S-1	BH-1	32	48" x 48"	45,000	ambient
S-2	BH-2	32	48" x 48"	32,500	ambient
S-3	Oxidizer	38	60"	55,000	185
S-4	Spray Booth, Line 2	38	24"	7,100	ambient
S-5	Spray Booth, Line 3	38	24"	5,600	ambient

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on July 26, 1999, with additional information received on August 6, 1999.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (7 pages).

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential To Emit (tons/year)
PM	228.66
PM-10	228.56
SO_2	0.0
VOC	3200.3
CO	3.7
NO_x	4.4

HAP’s	Potential To Emit (tons/year)
toluene	539.0
methanol	191.16

xylene	63.81
formaldehyde	2.66
TOTAL	***796.63***

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10 and VOC are greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination HAPs is greater than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Grant County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(c) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.4
PM10	2.3
SO_2	0
VOC	249*
CO	3.7
NO_x	4.4

toluene	116.7
xylene	59.5
methanol	31.3
formaldehyde	0.7

*VOC emissions are limited to 249 tons/year

(a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

(b) The VOC emissions are limited to 249 tons/year, therefore, the 326 IAC 2-2, PSD requirements do not apply. The VOC emissions limitations will be accomplished with a PSD minor limit and the use of a thermal oxidizer. See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (7 pages).

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

(a) at least one of the criteria pollutant is greater than or equal to 100 tons per year,

(b) a single hazardous air pollutant (HAP) is greater than or equal to 10 tons per year, or

(c) any combination of HAPs is greater than or equal to 25 tons/year.

This new source shall apply for a Part 70 (Title V) operating permit within twelve (12) months after this source becomes subject to Title V.

This is the first air approval issued to the source.

Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.

40 CFR Part 63, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations

(a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of the startup of the facility.

(b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

(1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:

(A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of eight-tenths (0.8) pound VHAP per pound

solids.

(B) Use compliant finishing materials in which all stains have a maximum VHAP content of (1.0) pound VHAP per pound solid, as applied.

Use compliant finishing materials in which all washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of eight-tenths (0.8) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight.

(C) Use a control device to limit emissions to eight-tenths (0.8) pound VHAP per pound solids; or

(D) Use a combination of (A), (B), and (C).

(2) Limit VHAP emissions contact adhesives as follows:

(A) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed two-tenths (0.2) of a pound VHAP per pound solids.

(B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed two-tenths (0.2) of a pound VHAP per pound solids.

(C) Use a control device to limit emissions to two-tenths (0.2) of a pound VHAP per pound solids.

(3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids.

Work Practice Standards [40 CFR 63.803]

Pursuant to 40 CFR 63 Subpart JJ, the owner or operator of an affected source shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

(a) Operator training course.
(b) Leak inspection and maintenance plan.
(c) Cleaning and washoff solvent accounting system.
(d) Chemical composition of cleaning and washoff solvents.
(e) Spray booth cleaning.
(f) Storage requirements.
(g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
(h) Line cleaning.
(i) Gun cleaning.
(j) Washoff operations.
(k) Formulation assessment plan for finishing operations.

The source will comply with 40 CFR Part 63, Subpart JJ by a combination of weighted averages and a control device.

State Rule Applicability

326 IAC 2-4.1-1 (New Source Toxics Control)

The source is a major source of HAP as defined in 326 IAC 2-4.1-1 due to its potential to emit a single HAP at a level greater than 10 tons/year and due to its potential to emit any combination of HAP at a level greater than 25 tons/year. This source is also subject to 40 CFR Part 63 Subpart JJ and meeting the requirements of this NESHAP will also satisfy the requirement of 326 IAC 2-4.1-1.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 100 tons/yr of VOC. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by July 1 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 5-1-2 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of fourty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

The 10 MMBTU/hr natural gas fired boiler is subject 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions shall be limited to 0.6 pounds per million BTU heat input.

Allowable PM emissions = (0.6 lb/MMBTU)*(10 MMBTU/hr)*(8760 hr/yr)*(1 ton/2000 lbs) = 26.3 tons/year

Based on this calculations, the controlled potential emissions are less than the allowable emissions, therefore, this boiler complies with the rule.

326 IAC 6-3 (Process Operations)

Pursuant to this rule, the surface coating booths and woodworking operation shall not exceed the allowable particulate matter (PM) emission rate as determined by the following:

The surface coating and woodworking operation shall comply with 326 IAC 6-3-2(c) using the following equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour, if
P is equal to or less than 60,000 lbs/hr (30 tons/hr)

The source will comply with this rule with the use of dry filters, water wash systems and baghouses.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The spray booths will apply coatings to wood furniture and cabinets, therefore, it is subject to the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating). Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components shall utilize one or more of the following application methods:

Airless Spray Application	Air-Assisted Airless Spray Application
Electrostatic Spray Application	Electrostatic Bell or Disc Application
Heated Airless Spray Application	Roller Coating
Brush or Wipe Application	Dip-and-Drain Application
High Volume Low Pressure HVLP	Aerosol Spray Cans

The spray booths included in this approval utilizes HVLP spray technology, and is therefore in compliance with 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

(a) This proposed new source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act.

(b) See attached Appendix A for detailed air toxic calculations.

Conclusion

The construction of this furniture and cabinet manufacturer will be subject to the conditions of the attached proposed **Construction Permit No. CP-053-11188-00058.**

Appendix A: Emission Calculations
HAP Emission Calculations

FOR LINE 1

Company Name: **American Woodmak**
Address City IN Zip: **P.O. Box 11 Gas City, IN 46933**
CP #: CP053-11188-00058
Plt ID:
Permit Reviewer: D. Harper
Date: 08/23/99

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Benzene	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Benzene Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
Hickory Spice	6.76	16.000000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Honey Oak D	6.91	32.000000	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hi Solids Top.	7.91	32.000000	1.00	0.18%	37.85%	0.02%	0.00%	0.00%	0.00%	0.00%	2.00	419.63	0.22	0.00	0.00	0.00	0.00
Band Cleaner	6.88	7.000000	1.00	0.00%	35.20%	0.00%	0.00%	0.00%	0.00%	13.80%	0.00	74.25	0.00	0.00	0.00	0.00	29.11
Cat. Sealer	7.51	32.000000	1.00	0.30%	0.00%	0.20%	0.00%	0.00%	0.00%	15.00%	3.16	0.00	2.11	0.00	0.00	0.00	157.89
Whiter Primer	9.66	0.000000	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total State Potential Emissions											**5.15**	**493.88**	**2.33**	**0.00**	**0.00**	**0.00**	**187.00**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

hapcalc.wb3

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

*****FOR LINE 1 ONLY*****

Company Name: **American Woodmark**
Address City IN Zip: **P.O. Box 11 Gas City, IN 46933**
CP: **CP 053-11188**
Plt ID:
Reviewer: **D. Harper**
Date: **08/23/99**

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Honey Oak Disp	7.0	98.06%	0.0%	98.1%	0.0%	1.14%	32.00000	1.000	6.86	6.86	219.65	5271.71	962.09	4.76	602.12	75%
Band Cleaner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	7.00000	1.000	6.90	6.90	48.30	1159.20	211.55	0.00	ERR	75%
Hickory Spice Sap	6.8	99.16%	0.0%	99.2%	0.0%	0.40%	16.00000	1.000	6.74	6.74	107.89	2589.27	472.54	1.00	1685.72	75%
Catalyzed Sealer	7.5	79.82%	0.0%	79.8%	0.0%	14.47%	32.00000	1.000	5.99	5.99	191.57	4597.63	839.07	53.03	41.37	75%
Hi Solids Topcoat	7.9	50.05%	0.0%	50.1%	0.0%	44.36%	32.00000	1.000	3.95	3.95	126.53	3036.63	554.19	138.27	8.91	75%
White Primer	9.7	52.69%	0.0%	52.7%	0.0%	28.78%	0.00000	0.000	5.11	5.11	0.00	0.00	0.00	0.00	17.76	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%

State Potential Emissions	**Add worst case coating to all solvents**	**693.93**	**16654.44**	**3039.43**	**197.06**	

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

surcoat.wb3

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: **American Woodmark**
Address City IN Zip: **P.O. Box 11 Gas City, IN 46933**
CP #: CP053-11188-00058
Plt ID:
Permit Reviewer: D. Harper
Date: 08/23/99

FOR LINES 2,3 ONLY

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Benzene	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Benzene Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
Hickory Spice	6.76	0.000000	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Honey Oak D	6.91	0.000000	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hi Solids Top	7.91	2.600000	1.00	0.18%	37.85%	0.02%	0.00%	0.00%	0.00%	0.00%	0.16	34.09	0.02	0.00	0.00	0.00	0.00
Band Cleaner	6.88	1.000000	1.00	0.00%	35.20%	0.00%	0.00%	0.00%	0.00%	13.80%	0.00	10.61	0.00	0.00	0.00	0.00	4.16
Cat. Sealer	7.51	0.000000	0.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
White Primer	9.66	4.000000	1.00	34.60%	0.25%	0.20%	0.00%	0.00%	0.00%	0.00%	58.56	0.42	0.34	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Total State Potential Emissions	58.72	45.13	0.36	0.00	0.00	0.00	4.16

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

hapcalc.wb3

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

*****FOR LINES 2, 3 ONLY*****

Company Name: American Woodmark
Address City IN Zip: P.O. Box 11 Gas City, IN 46933
CP: CP053-11188-00058
Plt ID:
Reviewer: D. Harper
Date: 08/23/99

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Honey Oak Disp	7.0	98.06%	0.0%	98.1%	0.0%	1.14%	0.00000	0.000	6.86	6.86	0.00	0.00	0.00	0.00	602.12	0%
Band Cleaner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	1.00000	1.000	6.90	6.90	6.90	165.60	30.22	0.00	ERR	75%
Hickory Spice Sap	6.8	99.16%	0.0%	99.2%	0.0%	0.40%	0.00000	0.000	6.74	6.74	0.00	0.00	0.00	0.00	1685.72	0%
Catalyzed Sealer	7.5	79.82%	0.0%	79.8%	0.0%	14.47%	0.00000	0.000	5.99	5.99	0.00	0.00	0.00	0.00	41.37	0%
Hi Solids Topcoat	7.9	50.05%	0.0%	50.1%	0.0%	44.36%	2.60000	1.000	3.95	3.95	10.28	246.73	45.03	11.23	8.91	75%
White Primer	9.7	52.69%	0.0%	52.7%	0.0%	28.78%	4.00000	1.000	5.11	5.11	20.44	490.65	89.54	20.10	17.76	75%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%

State Potential Emissions	**Add worst case coating to all solvents**	**37.62**	**902.98**	**164.79**	**31.33**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

surcoat.wb3

Appendix A: Emission Calculations
HAP Emission Calculations

Company Name: **American Woodmark**
Address City IN Zip: **P.O. Box 11 Gas City, IN 46933**
CP #:
Plt ID:
Permit Reviewer: D. Harper
Date:

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Benzene	Weight % Hexane	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Benzene Emissions (ton/yr)	Hexane Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)
Hickory Spice	6.76	***********	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Honey Oak D.	6.91	***********	1.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hi Solids Top.	7.91	***********	1.00	0.18%	37.85%	0.02%	0.00%	0.00%	0.00%	0.00%	2.15	453.72	0.22	0.00	0.00	0.00	0.00
Band Cleaner	6.88	8.000000	1.00	0.00%	35.20%	0.00%	0.00%	0.00%	0.00%	13.80%	0.00	84.86	0.00	0.00	0.00	0.00	33.27
Cat. Sealer	7.51	***********	1.00	0.30%	0.00%	0.20%	0.00%	0.00%	0.00%	15.00%	3.11	0.00	2.11	0.00	0.00	0.00	157.89
White Primer	9.66	4.000000	1.00	34.60%	0.25%	0.20%	0.00%	0.00%	0.00%	0.00%	58.56	0.42	0.34	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total State Potential Emissions											**63.81**	**539.00**	**2.66**	**0.00**	**0.00**	**0.00**	**191.16**

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

hapcalc.wb3

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: **American Woodmark**
Address City IN Zip: **P.O. Box 11 Gas City, IN 46933**
CP:
Plt ID: **11188.00000**
Reviewer: **D. Harper**
Date: **08/02/99**

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Honey Oak Disp	7.0	98.06%	0.0%	98.1%	0.0%	1.14%	32.00000	1.000	6.84	6.84	219.00	5256.11	959.24	4.74	600.34	75%
Band Cleaner	6.9	100.00%	0.0%	100.0%	0.0%	0.00%	8.00000	1.000	6.88	6.88	55.04	1320.96	241.08	0.00	ERR	75%
Hickory Spice Sap	6.8	99.16%	0.0%	99.2%	0.0%	0.40%	16.00000	1.000	6.71	6.71	107.41	2577.84	470.46	1.00	1678.28	75%
Catalyzed Sealer	7.5	79.82%	0.0%	79.8%	0.0%	14.47%	32.00000	1.000	5.99	5.99	191.82	4603.76	840.19	53.10	41.43	75%
Hi Solids Topcoat	7.9	50.05%	0.0%	50.1%	0.0%	44.36%	34.60000	1.000	3.96	3.96	136.98	3287.52	599.97	149.69	8.92	75%
White Primer	9.7	52.69%	0.0%	52.7%	0.0%	28.78%	4.00000	1.000	5.09	5.09	20.36	488.63	89.17	20.02	17.69	75%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
	0.0	0.00%	0.0%	0.0%	0.0%	0.00%	0.00000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	ERR	0%
State Potential Emissions		**Add worst case coating to all solvents**									**730.62**	**17534.81**	**3200.10**	**228.56**		

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

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Company Name: American Woodmark
Address: P.O. Box 11, Gas City, IN 46933
CP#: CP 053-11188-00058
Permit Reviewer: D. Harper

Line 1 at rated capacity
before control: 3035 tons VOC/year
after control: 440 tons VOC/year

Lines 2 and 3 at rated capacity
no control: 147 tons VOC/year

Lines 1, 2 and 3 before PSD limit
440 (Line 1)
+ 147 (Lines 2 & 3)
547 tons VOC/year

Lines 1, 2 and 3 after PSD limit
102 (Line 1)
+ 147 (Lines 2 & 3)
249 tons VOC/year

Line 1 VOC input

$$x = \frac{(3035 \text{ ton/year})(102 \text{ ton/year})}{(440 \text{ ton/year})}$$

x = 704 ton/year limit for VOC on Line 1

Woodworking Operations Calculations

326 IAC 6-3 (Process Operations)

The woodworking operations shall comply with 326 IAC 6-3-2(c) using the following equation:

$E = 4.10P^{0.67}$ where: E = rate of emission in pounds per hour,
P = process weight in tons per hour, if
P is equal to or less than 60,000 lbs/hr (30 tons/hr)

$E = 4.10(1.25)^{0.67}$
E = 4.76 pounds/hour